



Assessment of mammal-habitat interactions in Beas catchment: Steps towards sustainable natural resource management

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Background : The Great Himalayan National Park (H.P.) is selected as the study area in the Western Himalayas. The park protects 31 mammal species. It is also listed as UNESCO world heritage site. However, the Park still experiences anthropogenic pressures in the form of livestock grazing and medicinal plant collection. Therefore, there is a need to maintain the sustainability of the national park.

Objectives :

1. Assess the mammal-habitat interactions in relation to anthropogenic pressures such as livestock grazing, medicinal plant collection in the Great Himalayan National park conservation area (GHNPCA)
2. Develop a sustainable use protocol for diverse natural resources

Study area :

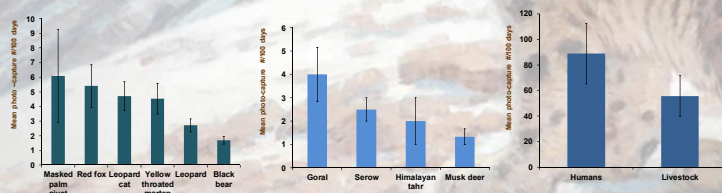
1. GHNPCA includes the Tirthan and Sainj Wildlife Sanctuaries, and an Eco-zone with a total area of 1171 km²

Methodology :

1. The study area was divided into 16x16 km grids which were further sub-divided into 4x4 km and 2x2 km grids
2. Deployed camera traps in 2x2km grids
3. Sign-surveys were conducted
4. Data loggers to be deployed in every 16x16 km grids

Results:

1. Seventeen mammals were photo-captured (April-July 2017)
2. Threatened mammals such as Himalayan musk deer (*Moschus chrysogaster* 0.11 ± 0.07 /100 days), Himalayan tahr (*Hemitragus jemlahicus* 0.13 ± 0.11 /100 days), and Himalayan serow (*Capricornis thar* 0.14 ± 0.10 /100 days) were recorded.
3. Simultaneously, high degrees of anthropogenic activities (human 481.66 ± 247.49/ 100 days, livestock 53.33 ± 3.67/100 days) were also recorded.



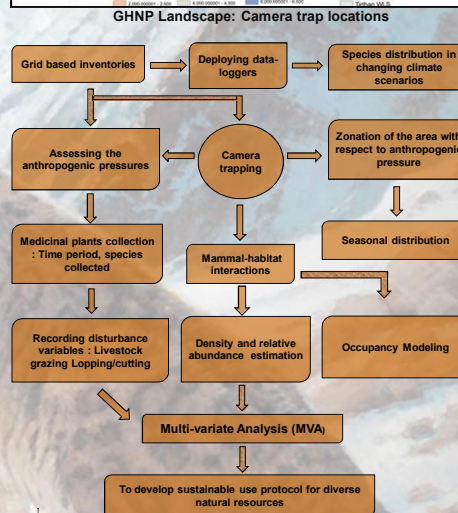
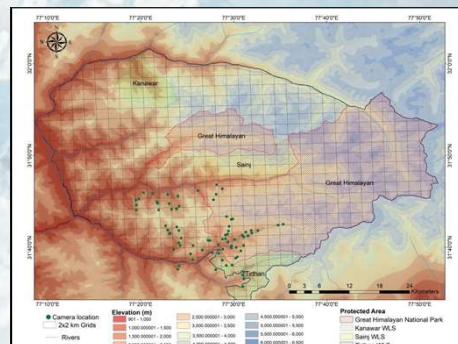
Conclusion : The knowledge of mammal-habitat interactions along with the variation in spatio-temporal distribution as a response to the anthropogenic impacts will help to develop a protocol for sustainable management of the area.

Acknowledgements/Citations:

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Picture credits: Google, NMSHE camera traps



Proposed work plan

